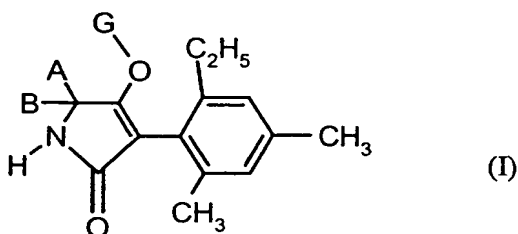


**Patent claims**

1. Compounds of the formula (I)

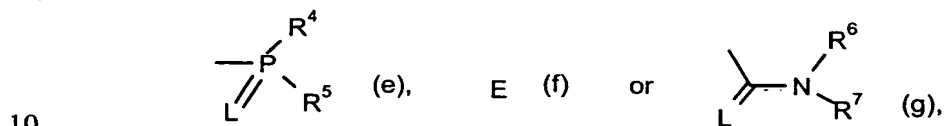
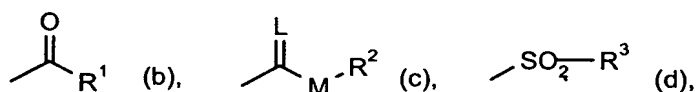


in which

- 5      A and B together with the carbon atom to which they are attached represent a saturated or unsaturated C<sub>3</sub>-C<sub>8</sub> ring which optionally contains at least one heteroatom and which is optionally substituted,

and

G      represents one of the groups



in which

E      represents a metal ion equivalent or an ammonium ion,

L      represents oxygen or sulphur,

M      represents oxygen or sulphur,

- 15      R<sup>1</sup>      represents in each case optionally substituted alkyl, alkenyl, alkoxyalkyl, alkylthioalkyl or polyalkoxyalkyl or represents in each case halogen-, alkyl- or alkoxy-substituted cycloalkyl or heterocyclyl or represents in each case optionally substituted phenyl or hetaryl,

$R^2$  represents in each case halogen-substituted alkyl, alkenyl, alkoxyalkyl or polyalkoxyalkyl or represents in each case optionally substituted cycloalkyl, phenyl or benzyl,

5  $R^3$ ,  $R^4$  and  $R^5$  independently of one another represent in each case optionally halogen-substituted alkyl, alkoxy, alkylamino, dialkylamino, alkylthio, alkenylthio or cycloalkylthio or represent in each case optionally substituted phenyl, benzyl, phenoxy or phenylthio,

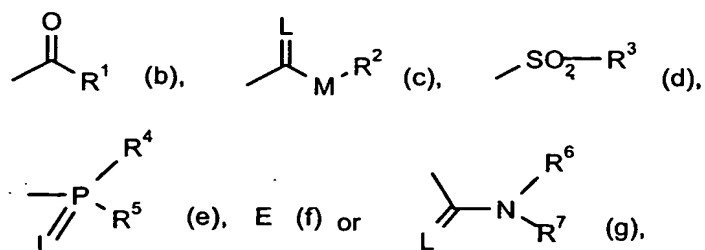
10  $R^6$  and  $R^7$  independently of one another represent hydrogen, represent in each case optionally halogen-substituted alkyl, cycloalkyl, alkenyl, alkoxy, alkoxyalkyl, or represent in each case optionally substituted phenyl or benzyl, or together with the N atom to which they are attached represent an optionally substituted cycle which optionally contains oxygen or sulphur.

2. Compounds of the formula (I) according to Claim 1,

in which

15 A, B and the carbon atom to which they are attached represent saturated  $C_3$ - $C_8$ -cycloalkyl or unsaturated  $C_5$ - $C_8$ -cycloalkyl in which optionally one methylene group is replaced by oxygen or sulphur and which is optionally substituted by  $C_1$ - $C_6$ -alkyl,  $C_1$ - $C_4$ -haloalkyl or  $C_1$ - $C_6$ -alkoxy,

G represents one of the groups



20

in which

E represents a metal ion equivalent or an ammonium ion,

L represents oxygen or sulphur and

M represents oxygen or sulphur,

- $R^1$  represents  $C_1$ - $C_{20}$ -alkyl,  $C_2$ - $C_{20}$ -alkenyl,  $C_1$ - $C_6$ -alkoxy- $C_1$ - $C_6$ -alkyl,  $C_1$ - $C_6$ -alkylthio- $C_1$ - $C_6$ -alkyl or poly- $C_1$ - $C_4$ -alkoxy- $C_1$ - $C_4$ -alkyl, each of which is optionally mono- to heptasubstituted by halogen, mono- or disubstituted by cyano, monosubstituted by  $COR^{13}$ ,  $C=N-OR^{13}$ ,  $CO_2R^{13}$  or  $CON\begin{smallmatrix} R^{13} \\ \diagup \\ R^{13} \end{smallmatrix}$  or represents  $C_3$ - $C_8$ -cycloalkyl which is
- 5 optionally mono- to trisubstituted by halogen,  $C_1$ - $C_4$ -alkyl or  $C_1$ - $C_4$ -alkoxy and in which optionally one or two not directly adjacent methylene groups are replaced by oxygen and/or sulphur,
- represents phenyl, phenyl- $C_1$ - $C_2$ -alkyl or phenyl- $C_1$ - $C_2$ -alkenyl, each of which is optionally mono- to trisubstituted by halogen, cyano, nitro,  $C_1$ - $C_6$ -alkyl,  $C_1$ - $C_6$ -alkoxy,  $C_1$ - $C_6$ -haloalkyl,  $C_1$ - $C_6$ -haloalkoxy,  $C_1$ - $C_6$ -alkylthio,  $C_1$ - $C_6$ -alkylsulphonyl or
- 10  $C_1$ - $C_6$ -alkylsulphonyl,
- represents 5- or 6-membered hetaryl which is optionally mono- or disubstituted by halogen or  $C_1$ - $C_6$ -alkyl and which contains one or two heteroatoms from the group consisting of oxygen, sulphur and nitrogen,
- 15  $R^2$  represents  $C_1$ - $C_{20}$ -alkyl,  $C_2$ - $C_{20}$ -alkenyl,  $C_1$ - $C_6$ -alkoxy- $C_2$ - $C_6$ -alkyl or poly- $C_1$ - $C_6$ -alkoxy- $C_2$ - $C_6$ -alkyl, each of which is optionally mono- to trisubstituted by halogen,
- represents  $C_3$ - $C_8$ -cycloalkyl which is optionally mono- or disubstituted by halogen,  $C_1$ - $C_6$ -alkyl or  $C_1$ - $C_6$ -alkoxy or
- represents phenyl or benzyl, each of which is optionally mono- to trisubstituted by
- 20 halogen, cyano, nitro,  $C_1$ - $C_6$ -alkyl,  $C_1$ - $C_6$ -alkoxy,  $C_1$ - $C_6$ -haloalkyl or  $C_1$ - $C_6$ -haloalkoxy,
- $R^3$  represents  $C_1$ - $C_8$ -alkyl which is optionally mono- or polysubstituted by halogen or represents phenyl or benzyl, each of which is optionally mono- or disubstituted by
- 25 halogen,  $C_1$ - $C_6$ -alkyl,  $C_1$ - $C_6$ -alkoxy,  $C_1$ - $C_4$ -haloalkyl,  $C_1$ - $C_4$ -haloalkoxy, cyano or nitro,
- $R^4$  and  $R^5$  independently of one another represent  $C_1$ - $C_8$ -alkyl,  $C_1$ - $C_8$ -alkoxy,  $C_1$ - $C_8$ -alkylamino, di( $C_1$ - $C_8$ -alkyl)amino,  $C_1$ - $C_8$ -alkylthio or  $C_2$ - $C_8$ -alkenylthio, each of
- 30 which is optionally mono- to trisubstituted by halogen, or represent phenyl, phenoxy or phenylthio, each of which is optionally mono- to trisubstituted by halogen, nitro, cyano,  $C_1$ - $C_4$ -alkoxy,  $C_1$ - $C_4$ -haloalkoxy,  $C_1$ - $C_4$ -alkylthio,  $C_1$ - $C_4$ -haloalkylthio,  $C_1$ - $C_4$ -alkyl or  $C_1$ - $C_4$ -haloalkyl,

5  $R^6$  and  $R^7$  independently of one another represent hydrogen, represent  $C_1$ - $C_8$ -alkyl,  $C_3$ - $C_8$ -cycloalkyl,  $C_1$ - $C_8$ -alkoxy,  $C_3$ - $C_8$ -alkenyl or  $C_1$ - $C_8$ -alkoxy- $C_2$ - $C_8$ -alkyl, each of which is optionally mono- to trisubstituted by halogen, represent phenyl or benzyl, each of which is optionally mono- to trisubstituted by halogen,  $C_1$ - $C_8$ -alkyl,  $C_1$ - $C_8$ -haloalkyl or  $C_1$ - $C_8$ -alkoxy, or together represent a  $C_3$ - $C_6$ -alkylene radical which is optionally mono- or disubstituted by  $C_1$ - $C_4$ -alkyl and in which optionally one methylene group is replaced by oxygen or sulphur,

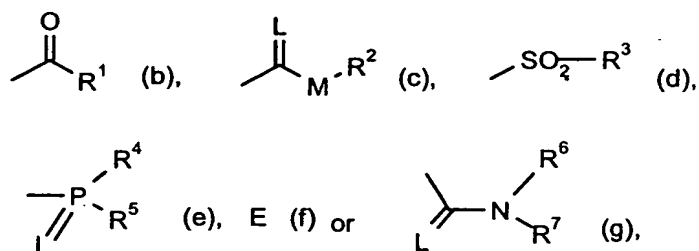
10  $R^{13}$  represents  $C_1$ - $C_6$ -alkyl,  $C_3$ - $C_6$ -alkenyl,  $C_3$ - $C_6$ -alkynyl or  $C_1$ - $C_4$ -alkoxy- $C_2$ - $C_4$ -alkyl, each of which is optionally mono- to trisubstituted by halogen, or represents  $C_3$ - $C_6$ -cycloalkyl which is optionally mono- or disubstituted by halogen,  $C_1$ - $C_2$ -alkyl or  $C_1$ - $C_2$ -alkoxy and in which optionally one or two not directly adjacent methylene groups are replaced by oxygen, or represents phenyl or phenyl- $C_1$ - $C_2$ -alkyl, each of which is optionally mono- or disubstituted by fluorine, chlorine, bromine,  $C_1$ - $C_4$ -alkyl,  $C_1$ - $C_4$ -alkoxy,  $C_1$ - $C_2$ -haloalkyl,  $C_1$ - $C_2$ -haloalkoxy, cyano or nitro,

15  $R^{13'}$  represents hydrogen,  $C_1$ - $C_6$ -alkyl or  $C_3$ - $C_6$ -alkenyl.

3. Compounds of the formula (I) according to Claim 1, in which

20 A, B and the carbon atom to which they are attached represent saturated  $C_3$ - $C_7$ -cycloalkyl in which optionally one methylene group is replaced by oxygen and which is optionally mono- or disubstituted by  $C_1$ - $C_4$ -alkyl,  $C_1$ - $C_2$ -haloalkyl or  $C_1$ - $C_4$ -alkoxy,

( ) G represents one of the groups



in which

E represents a metal ion equivalent or an ammonium ion,

25 L represents oxygen or sulphur and

M represents oxygen or sulphur,

R<sup>1</sup> represents C<sub>1</sub>-C<sub>10</sub>-alkyl, C<sub>2</sub>-C<sub>10</sub>-alkenyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy-C<sub>1</sub>-C<sub>2</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkylthio-C<sub>1</sub>-C<sub>2</sub>-alkyl or poly-C<sub>1</sub>-C<sub>3</sub>-alkoxy-C<sub>1</sub>-C<sub>2</sub>-alkyl, each of which is optionally mono- to pentasubstituted by fluorine or chlorine, monosubstituted by cyano, monosubstituted by CO-R<sup>13</sup>, C=N-OR<sup>13</sup> or CO<sub>2</sub>R<sup>13</sup>, or represents C<sub>3</sub>-C<sub>6</sub>-cycloalkyl which is optionally mono- or disubstituted by fluorine, chlorine, C<sub>1</sub>-C<sub>2</sub>-alkyl or C<sub>1</sub>-C<sub>2</sub>-alkoxy and in which optionally one or two not directly adjacent methylene groups are replaced by oxygen,

represents phenyl or benzyl, each of which is optionally mono- or disubstituted by fluorine, chlorine, bromine, cyano, nitro, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkylthio, C<sub>1</sub>-C<sub>4</sub>-sulphalkyl, C<sub>1</sub>-C<sub>4</sub>-alkylsulphonyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy, C<sub>1</sub>-C<sub>2</sub>-haloalkyl or C<sub>1</sub>-C<sub>2</sub>-haloalkoxy,

represents pyrazolyl, thiazolyl, pyridyl, pyrimidyl, furanyl or thienyl, each of which is mono- or disubstituted by fluorine, chlorine, bromine or C<sub>1</sub>-C<sub>2</sub>-alkyl,

R<sup>2</sup> represents C<sub>1</sub>-C<sub>10</sub>-alkyl, C<sub>2</sub>-C<sub>10</sub>-alkenyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy-C<sub>2</sub>-C<sub>4</sub>-alkyl or poly-C<sub>1</sub>-C<sub>4</sub>-alkoxy-C<sub>2</sub>-C<sub>4</sub>-alkyl, each of which is optionally mono- to trisubstituted by fluorine or chlorine,

represents C<sub>3</sub>-C<sub>7</sub>-cycloalkyl which is optionally monosubstituted by C<sub>1</sub>-C<sub>2</sub>-alkyl or C<sub>1</sub>-C<sub>2</sub>-alkoxy or

represents phenyl or benzyl, each of which is optionally mono- or disubstituted by fluorine, chlorine, bromine, cyano, nitro, C<sub>1</sub>-C<sub>4</sub>-alkyl, methoxy, trifluoromethyl or trifluoromethoxy,

R<sup>3</sup> represents C<sub>1</sub>-C<sub>4</sub>-alkyl which is optionally mono- to trisubstituted by fluorine or chlorine or represents phenyl or benzyl, each of which is optionally monosubstituted by fluorine, chlorine, bromine, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy, trifluoromethyl, trifluoromethoxy, cyano or nitro,

R<sup>4</sup> and R<sup>5</sup> independently of one another represent C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>1</sub>-C<sub>6</sub>-alkylamino, di(C<sub>1</sub>-C<sub>6</sub>-alkyl)amino, C<sub>1</sub>-C<sub>6</sub>-alkylthio or C<sub>3</sub>-C<sub>4</sub>-alkenylthio, each of which is optionally mono- to trisubstituted by fluorine or chlorine, or represent phenyl, phenoxy or phenylthio, each of which is optionally mono- or disubstituted by

fluorine, chlorine, bromine, nitro, cyano, C<sub>1</sub>-C<sub>3</sub>-alkoxy, trifluoromethoxy, C<sub>1</sub>-C<sub>3</sub>-alkylthio, C<sub>1</sub>-C<sub>3</sub>-alkyl or trifluoromethyl,

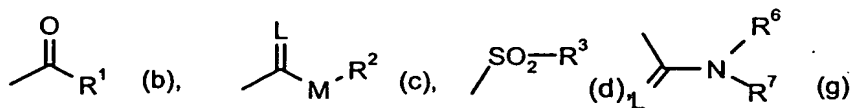
5 R<sup>6</sup> and R<sup>7</sup> independently of one another represent hydrogen, represent C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>3</sub>-C<sub>6</sub>-cycloalkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy, C<sub>3</sub>-C<sub>6</sub>-alkenyl or C<sub>1</sub>-C<sub>6</sub>-alkoxy-C<sub>2</sub>-C<sub>6</sub>-alkyl, each of which is optionally mono- to trisubstituted by fluorine or chlorine, represent phenyl which is optionally mono- or disubstituted by fluorine, chlorine, bromine, trifluoromethyl, C<sub>1</sub>-C<sub>4</sub>-alkyl or C<sub>1</sub>-C<sub>4</sub>-alkoxy, or together represent a C<sub>5</sub>-C<sub>6</sub>-alkylene radical which is optionally mono- or disubstituted by methyl and in which optionally one methylene group is replaced by oxygen,

10 R<sup>13</sup> represents C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>3</sub>-C<sub>4</sub>-alkenyl, C<sub>3</sub>-C<sub>4</sub>-alkynyl or C<sub>1</sub>-C<sub>4</sub>-alkoxy-C<sub>2</sub>-C<sub>3</sub>-alkyl or represents C<sub>3</sub>-C<sub>6</sub>-cycloalkyl in which optionally one methylene group is replaced by oxygen.

4. Compounds of the formula (I) according to Claim 1 in which

15 A, B and the carbon atom to which they are attached represent saturated C<sub>6</sub>-cycloalkyl in which optionally one methylene group is replaced by oxygen and which is optionally monosubstituted by methyl, ethyl, trifluoromethyl, methoxy, ethoxy, n-propoxy, isopropoxy, n-butoxy or isobutoxy,

G represents one of the groups



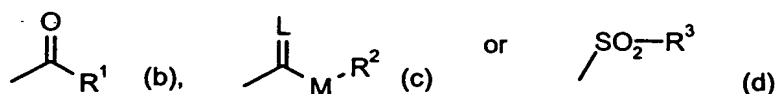
20 in which

L represents oxygen and

M represents oxygen or sulphur,

25 R<sup>1</sup> represents C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>2</sub>-C<sub>6</sub>-alkenyl, C<sub>1</sub>-C<sub>2</sub>-alkoxy-C<sub>1</sub>-C<sub>2</sub>-alkyl, C<sub>1</sub>-C<sub>2</sub>-alkylthio-C<sub>1</sub>-C<sub>2</sub>-alkyl or poly-C<sub>1</sub>-C<sub>2</sub>-alkoxy-C<sub>1</sub>-C<sub>2</sub>-alkyl, each of which is optionally mono- to trisubstituted by fluorine or chlorine, or represents cyclopropyl, cyclopentyl or cyclohexyl, each of which is optionally monosubstituted by fluorine, chlorine, methyl, ethyl or methoxy,

- represents phenyl which is optionally monosubstituted by fluorine, chlorine, bromine, cyano, nitro, methyl, ethyl, n-propyl, isopropyl, methoxy, ethoxy, methylthio, ethylthio, methylsulphinyl, ethylsulphinyl, methylsulphonyl, ethylsulphonyl, trifluoromethyl or trifluoromethoxy,
- 5 represents furanyl, thienyl or pyridyl, each of which is optionally monosubstituted by chlorine, bromine or methyl,
- $R^2$  represents  $C_1$ - $C_8$ -alkyl,  $C_2$ - $C_6$ -alkenyl or  $C_1$ - $C_3$ -alkoxy- $C_2$ - $C_3$ -alkyl, cyclopentyl or cyclohexyl,
- 10 or represents phenyl or benzyl, each of which is optionally monosubstituted by fluorine, chlorine, bromine, cyano, nitro, methyl, methoxy, trifluoromethyl or trifluoromethoxy,
- $R^3$  represents  $C_1$ - $C_4$ -alkyl which is optionally mono- to trisubstituted by fluorine or chlorine, or represents phenyl or benzyl, each of which is optionally monosubstituted by fluorine, chlorine, bromine,  $C_1$ - $C_4$ -alkyl,  $C_1$ - $C_4$ -alkoxy, trifluoromethyl, trifluoromethoxy, cyano or nitro,
- 15  $R^6$  represents hydrogen, represents  $C_1$ - $C_4$ -alkyl,  $C_3$ - $C_6$ -cycloalkyl or allyl, represents phenyl which is optionally monosubstituted by fluorine, chlorine, bromine, methyl, methoxy or trifluoromethyl,
- $R^7$  represents methyl, ethyl, n-propyl, isopropyl or allyl,
- 20  $R^6$  and  $R^7$  together represent a  $C_5$ - $C_6$ -alkylene radical in which optionally one methylene group is replaced by oxygen.
5. Compounds of the formula (I) according to Claim 1 in which
- A, B and the carbon atom to which they are attached represent saturated  $C_6$ -cycloalkyl which is optionally monosubstituted by methyl, methoxy or n-propoxy,
- 25 G represents one of the groups



in which

L represents oxygen and

M represents oxygen,

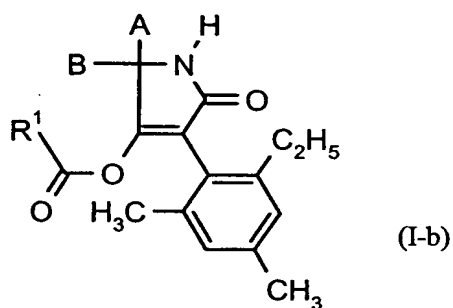
R<sup>1</sup> represents C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>2</sub>-alkoxy-C<sub>1</sub>-C<sub>2</sub>-alkyl or cyclopropyl,

R<sup>2</sup> represents C<sub>1</sub>-C<sub>8</sub>-alkyl or C<sub>2</sub>-C<sub>6</sub>-alkenyl,

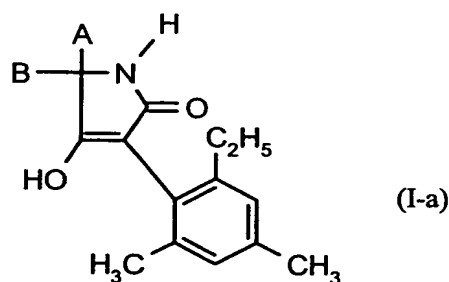
5 R<sup>3</sup> represents C<sub>1</sub>-C<sub>4</sub>-alkyl.

6. Process for preparing compounds of the formula (I) according to Claim 1, characterized in that, to obtain

(A) compounds of the formula (I-b)



10 in which A, B and R<sup>1</sup> are as defined above, compounds of the formula (I-a)



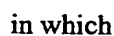
in which

A and B are as defined above,

are reacted

15 α) with acid halides of the formula (II)





Hal represents halogen

or

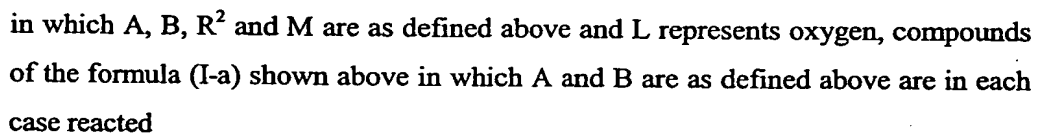
β) with carboxylic anhydrides of the formula (III)



$R^1$  is as defined above,

if appropriate in the presence of a diluent and if appropriate in the presence of an acid binder,

(C) compounds of the formula (I-c)



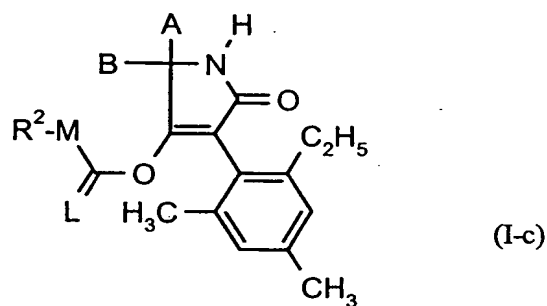
with chloroformic esters or chloroformic thioesters of the formula (IV)



$R^2$  and M are as defined above,

if appropriate in the presence of a diluent and if appropriate in the presence of an acid binder,

(D) compounds of the formula (I-c)

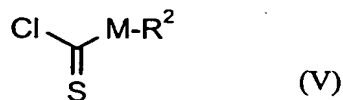


5

in which

A, B,  $R^2$  and M are as defined above and L represents sulphur, compounds of the formula (I-a) shown above in which A and B are as defined above are in each case reacted

10      α) with chloromonothioformic esters or chlorodithioformic esters of the formula (V)



in which

M and  $R^2$  are as defined above,

if appropriate in the presence of a diluent and if appropriate in the presence of an acid binder,

15

or

β) with carbon disulphide and then with compounds of the formula (VI)



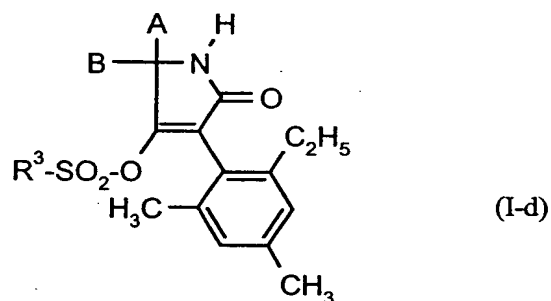
in which

$R^2$  is as defined above and

Hal represents chlorine, bromine or iodine,

if appropriate in the presence of a diluent and if appropriate in the presence of a base,

(E) compounds of the formula (I-d)



5

in which A, B and  $R^3$  are as defined above, compounds of the formula (I-a) shown above in which A and B are as defined above are in each case reacted

with sulphonyl chlorides of the formula (VII),



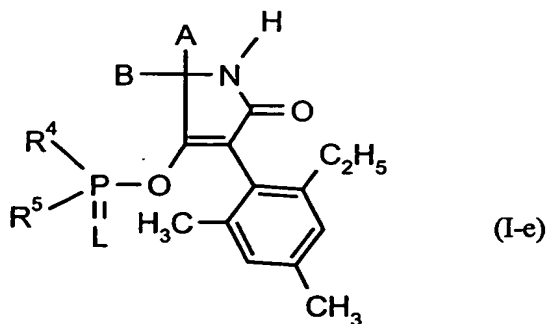
10

in which

$R^3$  is as defined above,

if appropriate in the presence of a diluent and if appropriate in the presence of an acid binder,

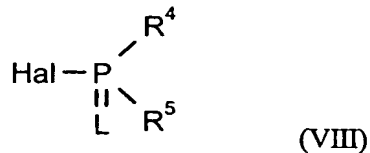
(F) compounds of the formula (I-e)



15

in which A, B, L, R<sup>4</sup> and R<sup>5</sup> are as defined above, compounds of the formula (I-a) shown above in which A and B are as defined above are in each case

reacted with phosphorus compounds of the formula (VIII)



5

in which

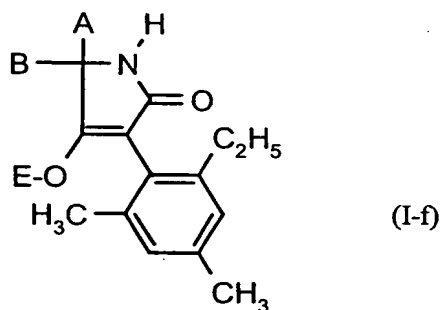
L, R<sup>4</sup> and R<sup>5</sup> are as defined above and

Hal represents halogen,

if appropriate in the presence of a diluent and if appropriate in the presence of an acid binder,

10

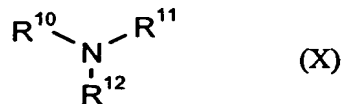
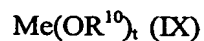
(G) compounds of the formula (I-f)



in which A, B and E are as defined above, compounds of the formula (I-a) shown above in which A and B are as defined above are in each case reacted

with metal compounds or amines of the formulae (IX) and (X), respectively,

15



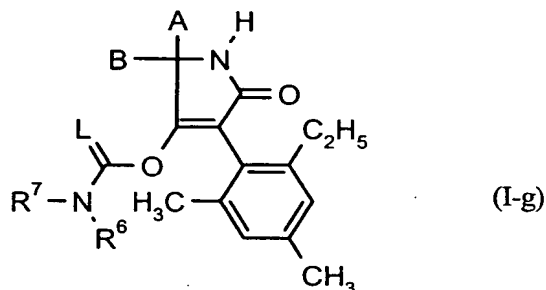
in which

Me represents a mono- or divalent metal,

t represents a number 1 or 2 and

$R^{10}$ ,  $R^{11}$ ,  $R^{12}$  independently of one another represent hydrogen or alkyl,  
if appropriate in the presence of a diluent,

(H) compounds of the formula (I-g)



5 in which A, B, L,  $R^6$  and  $R^7$  are as defined above, compounds of the formula (I-a) shown above in which A and B are as defined above are in each case reacted

a) with isocyanates or isothiocyanates of the formula (XI)

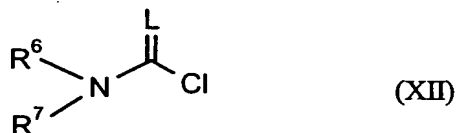


in which

10  $R^6$  and L are as defined above,

if appropriate in the presence of a diluent and if appropriate in the presence of a catalyst, or

b) with carbamoyl chlorides or thiocarbamoyl chlorides of the formula (XII)

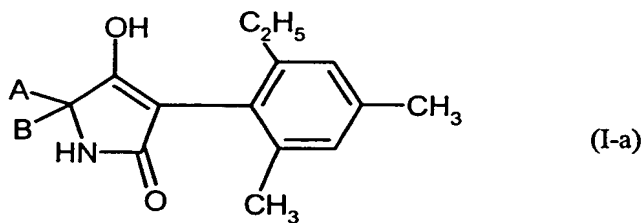


15 in which

L,  $R^6$  and  $R^7$  are as defined above,

if appropriate in the presence of a diluent and if appropriate in the presence of an acid binder.

7. Use of compounds of the formula (I) according to Claim 1 for preparing pesticides and herbicides.
8. Pesticides and herbicides, characterized in that they comprise at least one compound of the formula (I) according to Claim 1.
- 5 9. Method for controlling animal pests and unwanted vegetation, characterized in that compounds of the formula (I) are allowed to act on pests and/or their habitats.
10. Use of compounds of the formula (I) according to Claim 1 for controlling animal pests and unwanted vegetation.
11. Process for preparing pesticides and herbicides, characterized in that compounds of the formula (I) according to Claim 1 are mixed with extenders and/or surfactants.
- 10 12. Compositions, comprising an effective amount of a combination of active compounds comprising
  - a') at least one substituted cyclic ketoenol of the formula (I) according to Claim 1 in which A, B and G are as defined above,
  - 15 or
  - b') at least one substituted cyclic ketoenol of the formula (I-a)



in which

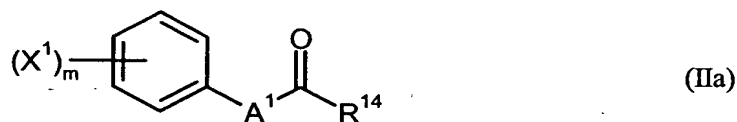
A and B are as defined above, and

- 20 c') at least one crop plant compatibility-improving compound from the following group of compounds:

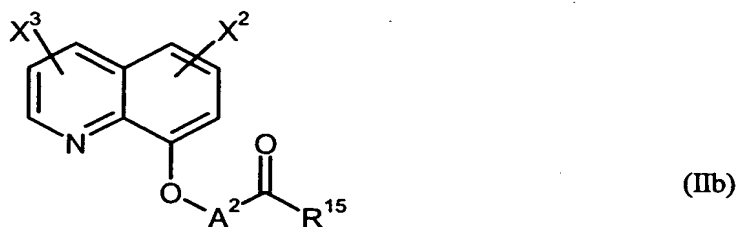
4-dichloroacetyl-1-oxa-4-azaspiro[4.5]decane (AD-67, MON-4660), 1-dichloroacetyl-hexahydro-3,3,8a-trimethylpyrrolo[1,2-a]pyrimidin-6(2H)-one (dicyclonon, BAS-145138), 4-dichloroacetyl-3,4-dihydro-3-methyl-2H-1,4-benzoxazine (benoxacor), 1-methylhexyl

5-chloroquinoline-8-oxyacetate (cloquintocet-mexyl - cf. also related compounds in EP-A-86750, EP-A-94349, EP-A-191736, EP-A-492366), 3-(2-chlorobenzyl)-1-(1-methyl-1-phenylethyl)urea (cumyluron),  $\alpha$ -(cyanomethoximino)phenylacetone nitrile (cyometrinil), 2,4-dichlorophenoxyacetic acid (2,4-D), 4-(2,4-dichlorophenoxy)butyric acid (2,4-DB), 1-(1-methyl-1-phenylethyl)-3-(4-methylphenyl)urea (daimuron, dymron), 3,6-dichloro-2-methoxybenzoic acid (dicamba), S-1-methyl 1-phenylethyl piperidine-1-thiocarboxylate (dimepiperate), 2,2-dichloro-N-(2-oxo-2-(2-propenylamino)ethyl)-N-(2-propenyl)-acetamide (DKA-24), 2,2-dichloro-N,N-di-2-propenylacetamide (dichlormid), 4,6-dichloro-2-phenylpyrimidine (fencloirim), ethyl 1-(2,4-dichlorophenyl)-5-trichloromethyl-1H-1,2,4-triazole-3-carboxylate (fenchlorazole-ethyl - cf. also related compounds in EP-A-174562 and EP-A-346620), phenylmethyl 2-chloro-4-trifluoromethylthiazole-5-carboxylate (flurazole), 4-chloro-N-(1,3-dioxolan-2-ylmethoxy)- $\alpha$ -trifluoroacetophenone oxime (fluxofenim), 3-dichloroacetyl-5-(2-furanyl)-2,2-dimethyloxazolidine (furilazole, MON-13900), ethyl 4,5-dihydro-5,5-diphenyl-3-isoxazolecarboxylate (isoxadifen-ethyl - cf. also related compounds in WO-A-95/07897), 1-(ethoxycarbonyl)ethyl 3,6-dichloro-2-methoxybenzoate (lactidichlor), (4-chloro-o-tolyloxy)acetic acid (MCPA), 2-(4-chloro-o-tolyloxy)propionic acid (mecoprop), diethyl 1-(2,4-dichlorophenyl)-4,5-dihydro-5-methyl-1H-pyrazole-3,5-dicarboxylate (mefenpyr-diethyl - cf. also related compounds in WO-A-91/07874), 2-dichloromethyl-2-methyl-1,3-dioxolane (MG-191), 2-propenyl 1-oxa-4-azaspiro[4.5]decane-4-carbodithioate (MG-838), 1,8-naphthalic anhydride,  $\alpha$ -(1,3-dioxolan-2-ylmethoximino)phenylacetone nitrile (oxabetrinil), 2,2-dichloro-N-(1,3-dioxolan-2-ylmethyl)-N-(2-propenyl)acetamide (PPG-1292), 3-dichloroacetyl-2,2-dimethyloxazolidine (R-28725), 3-dichloroacetyl-2,2,5-trimethyloxazolidine (R-29148), 4-(4-chloro-o-tolyl)butyric acid, 4-(4-chlorophenoxy)butyric acid, diphenylmethoxyacetic acid, methyl diphenylmethoxyacetate, ethyl diphenylmethoxyacetate, methyl 1-(2-chlorophenyl)-5-phenyl-1H-pyrazole-3-carboxylate, ethyl 1-(2,4-dichlorophenyl)-5-methyl-1H-pyrazole-3-carboxylate, ethyl 1-(2,4-dichlorophenyl)-5-isopropyl-1H-pyrazole-3-carboxylate, ethyl 1-(2,4-dichlorophenyl)-5-(1,1-dimethylethyl)-1H-pyrazole-3-carboxylate, ethyl 1-(2,4-dichlorophenyl)-5-phenyl-1H-pyrazole-3-carboxylate (cf. also related compounds in EP-A-269806 and EP-A-333131), ethyl 5-(2,4-dichlorobenzyl)-2-isoxazoline-3-carboxylate, ethyl 5-phenyl-2-isoxazoline-3-carboxylate, ethyl 5-(4-fluorophenyl)-5-phenyl-2-isoxazoline-3-carboxylate (cf. also related compounds in WO-A-91/08202), 1,3-dimethylbut-1-yl 5-chloroquinoline-8-oxyacetate, 4-allyloxybutyl 5-chloroquinoline-8-oxyacetate, 1-allyloxyprop-2-yl 5-chloroquinoline-8-oxyacetate, methyl 5-chloroquinoxaline-8-oxyacetate, ethyl 5-chloroquinoline-8-oxyacetate, allyl 5-chloroquinoxaline-8-oxyacetate, 2-oxoprop-1-yl 5-chloroquinoline-8-oxyacetate, diethyl

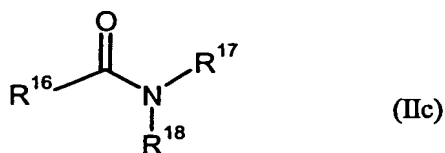
- 5-chloroquinoline-8-oxymalonate, diallyl 5-chloroquinoxaline-8-oxymalonate, diethyl 5-chloroquinoline-8-oxymalonate (cf. also related compounds in EP-A-582198), 4-carboxychroman-4-ylacetic acid (AC-304415, cf. EP-A-613618), 4-chlorophenoxyacetic acid, 3,3'-dimethyl-4-methoxybenzophenone, 1-bromo-4-chloromethylsulphonylbenzene, 1-[4-(N-2-methoxybenzoylsulphamoyl)phenyl]-3-methylurea (also known as N-(2-methoxybenzoyl)-4-[(methylaminocarbonyl)amino]benzenesulphonamide), 1-[4-(N-2-methoxybenzoylsulphamoyl)phenyl]-3,3-dimethylurea, 1-[4-(N-4,5-dimethylbenzoylsulphamoyl)phenyl]-3-methylurea, 1-[4-(N-naphthylsulphamoyl)phenyl]-3,3-dimethylurea, N-(2-methoxy-5-methylbenzoyl)-4-(cyclopropylaminocarbonyl)benzenesulphonamide,
- 10 and/or one of the following compounds, defined by general formulae, of the general formula (IIa)



or of the general formula (IIb)



or of the formula (IIc)

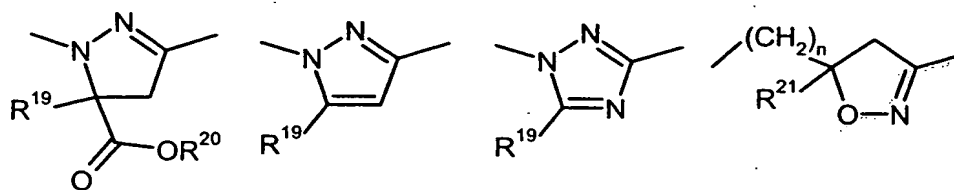


where

m represents a number 0, 1, 2, 3, 4 or 5,

20 A¹ represents one of the divalent heterocyclic groupings shown below,





- n represents a number 0, 1, 2, 3, 4 or 5,
- A<sup>2</sup> represents optionally C<sub>1</sub>-C<sub>4</sub>-alkyl- and/or C<sub>1</sub>-C<sub>4</sub>-alkoxy-carbonyl- and/or C<sub>1</sub>-C<sub>4</sub>-alkenyloxy-carbonyl-substituted alkanediyl having 1 or 2 carbon atoms,
- 5 R<sup>14</sup> represents hydroxyl, mercapto, amino, C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>1</sub>-C<sub>6</sub>-alkylthio, C<sub>1</sub>-C<sub>6</sub>-alkylamino or di(C<sub>1</sub>-C<sub>4</sub>-alkyl)amino,
- R<sup>15</sup> represents hydroxyl, mercapto, amino, C<sub>1</sub>-C<sub>7</sub>-alkoxy, C<sub>1</sub>-C<sub>6</sub>-alkenyloxy, C<sub>1</sub>-C<sub>6</sub>-alkenyloxy-C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>1</sub>-C<sub>6</sub>-alkylthio, C<sub>1</sub>-C<sub>6</sub>-alkylamino or di(C<sub>1</sub>-C<sub>4</sub>-alkyl)-amino,
- 10 R<sup>16</sup> represents in each case optionally fluorine-, chlorine- and/or bromine-substituted C<sub>1</sub>-C<sub>4</sub>-alkyl,
- R<sup>17</sup> represents hydrogen, in each case optionally fluorine-, chlorine- and/or bromine-substituted C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>2</sub>-C<sub>6</sub>-alkenyl or C<sub>2</sub>-C<sub>6</sub>-alkynyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy-C<sub>1</sub>-C<sub>4</sub>-alkyl, dioxolanyl-C<sub>1</sub>-C<sub>4</sub>-alkyl, furyl, furyl-C<sub>1</sub>-C<sub>4</sub>-alkyl, thienyl, thiazolyl, piperidinyl, or
- 15 optionally fluorine-, chlorine- and/or bromine- or C<sub>1</sub>-C<sub>4</sub>-alkyl-substituted phenyl,
- R<sup>18</sup> represents hydrogen, in each case optionally fluorine-, chlorine- and/or bromine-substituted C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>2</sub>-C<sub>6</sub>-alkenyl or C<sub>2</sub>-C<sub>6</sub>-alkynyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy-C<sub>1</sub>-C<sub>4</sub>-alkyl, dioxolanyl-C<sub>1</sub>-C<sub>4</sub>-alkyl, furyl, furyl-C<sub>1</sub>-C<sub>4</sub>-alkyl, thienyl, thiazolyl, piperidinyl, or optionally fluorine-, chlorine- and/or bromine- or C<sub>1</sub>-C<sub>4</sub>-alkyl-substituted phenyl, or
- 20 R<sup>17</sup> and R<sup>18</sup> also together optionally represent C<sub>3</sub>-C<sub>6</sub>-alkanediyl or C<sub>2</sub>-C<sub>5</sub>-oxaalkanediyl, each of which is optionally substituted by C<sub>1</sub>-C<sub>4</sub>-alkyl, phenyl, furyl, a fused benzene ring or by two substituents which, together with the C atom to which they are attached, form a 5- or 6-membered carbocycle,
- R<sup>19</sup> represents hydrogen, cyano, halogen, or represents in each case optionally fluorine-,
- 25 chlorine- and/or bromine-substituted C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>3</sub>-C<sub>6</sub>-cycloalkyl or phenyl,
- R<sup>20</sup> represents hydrogen, optionally hydroxyl-, cyano-, halogen- or C<sub>1</sub>-C<sub>4</sub>-alkoxy-substituted C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>3</sub>-C<sub>6</sub>-cycloalkyl or tri(C<sub>1</sub>-C<sub>4</sub>-alkyl)silyl,

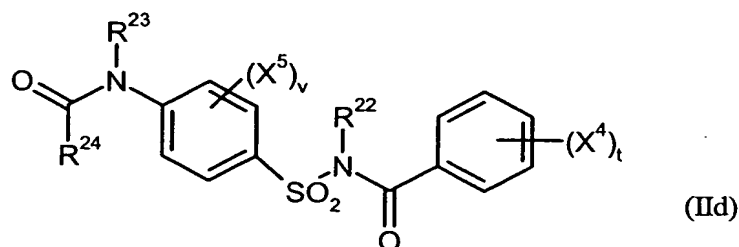
$R^{21}$  represents hydrogen, cyano, halogen, or represents in each case optionally fluorine-, chlorine- and/or bromine-substituted  $C_1$ - $C_4$ -alkyl,  $C_3$ - $C_6$ -cycloalkyl or phenyl,

$X^1$  represents nitro, cyano, halogen,  $C_1$ - $C_4$ -alkyl,  $C_1$ - $C_4$ -haloalkyl,  $C_1$ - $C_4$ -alkoxy or  $C_1$ - $C_4$ -haloalkoxy,

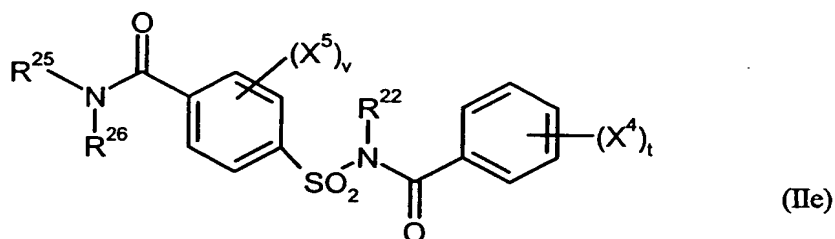
5  $X^2$  represents hydrogen, cyano, nitro, halogen,  $C_1$ - $C_4$ -alkyl,  $C_1$ - $C_4$ -haloalkyl,  $C_1$ - $C_4$ -alkoxy or  $C_1$ - $C_4$ -haloalkoxy,

$X^3$  represents hydrogen, cyano, nitro, halogen,  $C_1$ - $C_4$ -alkyl,  $C_1$ - $C_4$ -haloalkyl,  $C_1$ - $C_4$ -alkoxy or  $C_1$ - $C_4$ -haloalkoxy,

and/or the following compounds, defined by general formulae, of the general formula (IId)



or of the general formula (IIe)



where

$t$  represents a number 0, 1, 2, 3, 4 or 5,

15  $v$  represents a number 0, 1, 2, 3, 4 or 5,

$R^{22}$  represents hydrogen or  $C_1$ - $C_4$ -alkyl,

$R^{23}$  represents hydrogen or  $C_1$ - $C_4$ -alkyl,

$R^{24}$  represents hydrogen, in each case optionally cyano-, halogen- or  $C_1$ - $C_4$ -alkoxy-substituted  $C_1$ - $C_6$ -alkyl,  $C_1$ - $C_6$ -alkoxy,  $C_1$ - $C_6$ -alkylthio,  $C_1$ - $C_6$ -alkylamino or di( $C_1$ - $C_4$ -

alkyl)amino, or in each case optionally cyano-, halogen- or C<sub>1</sub>-C<sub>4</sub>-alkyl-substituted C<sub>3</sub>-C<sub>6</sub>-cycloalkyl, C<sub>3</sub>-C<sub>6</sub>-cycloalkyloxy, C<sub>3</sub>-C<sub>6</sub>-cycloalkylthio or C<sub>3</sub>-C<sub>6</sub>-cycloalkylamino,

5 R<sup>25</sup> represents hydrogen, optionally cyano-, hydroxyl-, halogen- or C<sub>1</sub>-C<sub>4</sub>-alkoxy-substituted C<sub>1</sub>-C<sub>6</sub>-alkyl, in each case optionally cyano- or halogen-substituted C<sub>3</sub>-C<sub>6</sub>-alkenyl or C<sub>3</sub>-C<sub>6</sub>-alkynyl, or optionally cyano-, halogen- or C<sub>1</sub>-C<sub>4</sub>-alkyl-substituted C<sub>3</sub>-C<sub>6</sub>-cycloalkyl,

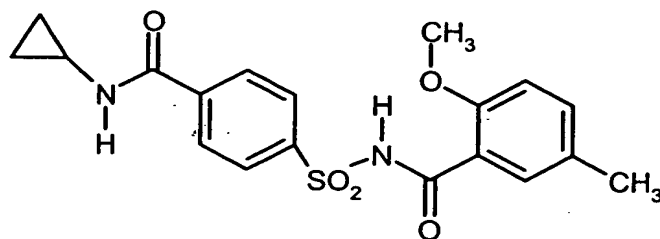
10 R<sup>26</sup> represents hydrogen, optionally cyano-, hydroxyl-, halogen- or C<sub>1</sub>-C<sub>4</sub>-alkoxy-substituted C<sub>1</sub>-C<sub>6</sub>-alkyl, in each case optionally cyano- or halogen-substituted C<sub>3</sub>-C<sub>6</sub>-alkenyl or C<sub>3</sub>-C<sub>6</sub>-alkynyl, optionally cyano-, halogen- or C<sub>1</sub>-C<sub>4</sub>-alkyl-substituted C<sub>3</sub>-C<sub>6</sub>-cycloalkyl, or optionally nitro-, cyano-, halogen-, C<sub>1</sub>-C<sub>4</sub>-alkyl-, C<sub>1</sub>-C<sub>4</sub>-haloalkyl-, C<sub>1</sub>-C<sub>4</sub>-alkoxy- or C<sub>1</sub>-C<sub>4</sub>-haloalkoxy-substituted phenyl, or together with R<sup>25</sup> represents in each case optionally C<sub>1</sub>-C<sub>4</sub>-alkyl-substituted C<sub>2</sub>-C<sub>6</sub>-alkanediyl or C<sub>2</sub>-C<sub>5</sub>-oxaalkanediyl,

15 X<sup>4</sup> represents nitro, cyano, carboxyl, carbamoyl, formyl, sulphamoyl, hydroxyl, amino, halogen, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-haloalkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy or C<sub>1</sub>-C<sub>4</sub>-haloalkoxy, and

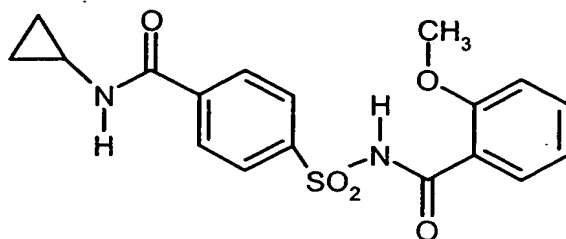
X<sup>5</sup> represents nitro, cyano, carboxyl, carbamoyl, formyl, sulphamoyl, hydroxyl, amino, halogen, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-haloalkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy or C<sub>1</sub>-C<sub>4</sub>-haloalkoxy.

13. 20 Compositions according to Claim 12, where the crop plant compatibility-improving compound is selected from the following group of compounds:

cloquintocet-mexyl, fenchlorazole-ethyl, isoxadifen-ethyl, mefenpyr-diethyl, furilazole, fencloirim, cumyluron, dymron or the compounds



and



14. Compositions according to Claim 12 or 13 where the crop plant compatibility-improving compound is cloquintocet-mexyl or mefenpyr-diethyl.
- 5 15. Method for controlling unwanted vegetation, characterized in that a composition according to Claim 12 is allowed to act on the plants or their habitat.
16. Use of a composition according to Claim 12 for controlling unwanted vegetation.